Skin Cancer: Preventing America's Most Common Cancer

Skin cancer is the most common form of cancer in the United States. The three major types of skin cancer are the highly curable basal cell and squamous cell carcinomas and the more serious malignant melanoma. Both basal cell carcinoma and squamous cell carcinoma have a better than 95% cure rate if detected and treated early. The American Cancer Society estimates that during 2003, about 1 million new cases of basal cell or squamous cell carcinoma and abut 54,200 new cases of malignant melanoma will be diagnosed. It is also expected that skin cancer will claim the lives of approximately 9,800 Americans. In 2003, at current rates one in 39 Americans have a lifetime risk of developing melanoma and one in 67 Americans have a lifetime risk of developing invasive melanoma. The incidence of melanoma more than tripled among Caucasians between 1980 and 2003. One person dies of melanoma every hour; more than 77% of skin cancer deaths are from melanoma.

How to Spot Skin Cancer

Coupled with a yearly skin exam by a doctor, self-examination of your skin once a month is the best way to detect the early warning signs of basal cell carcinoma, squamous cell carcinoma, and malignant melanoma, the three main types of skin cancer. Look for a new growth or any skin change. You will need: a bright light, a full-length mirror, a hand mirror, two chairs or stools, and a blow-dryer.

- Examine head and face, using one or both mirrors. Use blow-dryer to inspect scalp.
- Check hands, including nails. In full-length mirror, examine elbows, arms, underarms.
- Focus on neck, chest, and torso. Women: Check under breasts.
- With back to the mirror, use hand mirror to inspect back of neck, shoulders, upper arms, back, buttocks, and legs.
- Sitting down, check legs and feet, including soles, heels, and nails. Use hand mirror to examine genitals.

ABCDs of Melanoma Detection

Look for danger signs in pigmented (colored) lesions of the skin. Consult your dermatologist immediately if any of your moles or pigmented spots exhibit: Asymmetry–one half unlike the other half; Border Irregularity–scalloped or poorly circumscribed border; Color Variation–color varied from one area to another; shades of tan and brown; black; sometimes white, red or blue; Diameter–diameter larger than 6mm as a rule (diameter of a pencil eraser). Mind these ABCDs; they may be signs of malignant melanoma.

Sunscreen and Sun Protection

While it is important to practice sun safety, it is even more important to practice it correctly. Previous studies have shown that sunscreen users do not apply enough sunscreen in a single application to adequately protect the whole body. Consequently, the SPF achieved will be

considerably less than that expected and in many cases will be closer to half of that indicated by the product label. One ounce of sunscreen, enough to fill a shot glass, is considered the amount needed to cover the exposed areas of the body completely.

Sunscreens work by absorbing, reflecting, or scattering the sun's rays on the skin. They are available in many forms, including ointments, creams, gels, lotions, sprays, and wax sticks. All are labeled with SPF numbers. The higher the SPF, the greater the protection from sunburn, caused mostly by UVB rays. Some sunscreens, called "broad spectrum," reflect both UVA and UVB rays. They do a better job of protecting skin from other effects of the sun including photo damage, photo dermatitis, and sun rashes.

Sunscreens that block UVB rays are composed of a mixture of some or all of the following chemicals: padimate O homosalate, octyl methoxyginnamate, benzophenone, octyl salicylate, phenylbenzimidazole sulfonic acid and octocrylene. Broad-spectrum sunscreens add oxybenzone or avobenzone (Parsol 1789) to block UVA rays. Physical sunscreens/blocks or chemical free sunscreens contain titanium dioxide and/or zinc oxide, which reflect UVB and UVA and can be used by people allergic to chemical sunscreens.

Tips for Effective Sunscreen Use and Sun Protection

- Wear a broad-spectrum sunscreen with a sun protection factor (SPF) of at least 15.
- Use sunscreens every day if you are going to be in the sun for more than 20 minutes.
- Apply sunscreens to dry skin 15–30 minutes before going outdoors.
- When applying sunscreen, pay particular attention to the face, ears, hands and arms, and generously coat the skin that is not covered by clothing.
- Reapply sunscreens every two hours or immediately after swimming or strenuous activity.
- Reapplying sunscreen at least every two hours is key to its effective use.
- Wear a broad-brimmed hat and sunglasses.
- Seek shade whenever possible.
- Wear protective, tightly woven clothing.
- Plan outdoor activities early or late in the day to avoid peak sunlight hours between 10 AM and 4 PM. Even on cloudy days when it does not feel hot, or under trees, sunscreen and sun protective measures should be used because sunburn and sun damage to the skin can occur.
- Beach umbrellas and other kinds of shade are a good idea, but they do not provide full protection because UV rays can still bounce off sand, water, and porch decks–remember, UV rays are invisible.
- Most clothing absorbs or reflects UV rays, but white fabric like loose-knit cotton and wet clothes that cling to your skin do not offer much protection. The tighter the weave, the more sun protection it will offer.
- Sun protection is also important in the winter. Snow reflects up to 80% of the sun's rays, causing sunburn and damage to uncovered skin. Winter sports in the mountains increase the risk of sun damage because there is less atmosphere to block the sun's rays.

Remember, an ounce of prevention (sunscreen) applied every two hours may be the difference in your acquiring skin cancer or not.